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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,219	11/15/2005	Douglas McBain	OMNZ 2 00021	1372

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EXAMINER	
LIU, XUE H	

ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/534,219	MCBAIN ET AL.	
	Examiner	Art Unit	
	XUE LIU	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☒ Claim(s) *1 and 10* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Amendment to the claims filed on 11/20/08 is acknowledged. Currently, claims 1-10 are pending. Claims 2-4, 6-9 are currently amended. Claim 10 is new.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-18 of copending Application No. 10/534264. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are obvious variants of the claims of Application No. 10/534264.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application Claims	**10/534264 Claims**
1 and 7	7 and 10
2	7-8
3 and 10	7 and 9
4	7 and 11
5	7 and 12-13
6	7 and 15-16
7	7 and 17
8	7 and 14
9	7 and 18

In the preamble of claim 7 (claims 8-18 are dependent on claim 7) of Application No. 10/534264, a "method for ensuring the quality of in-mold coated thermoplastic parts" is narrower than a "method for assuring that coated molded articles meet predetermined quality standards, said articles being formed entirely in a mold" as cited in the preamble of applicant's claim 1

because the coated molded articles reads on the coated thermoplastic part. "Said articles being formed entirely in a mold by a process that includes forming a substrate from a first composition using a first set of process conditions" as cited in the preamble of applicant's claim 1 is obvious over step d) of claim 7 in 10/534264 "manufacturing an in-mold coated thermoplastic part by molding a thermoplastic using a first set of process conditions in a closed mold to form a substrate" and step a) of claim 7 in 10/534264, which recites "conducting at least one in-mold trial run that includes coating a thermoplastic substrate with an in-mold coating using a particular mold and polymeric material". While the preamble of claim 7 does not positively recite the limitation "allowing said coating composition to cure on said substrate so as to provide a coated molded article" as required by applicant's claim 1, the coating composition has to be cured on the substrate in order to harden the coating thereby forming a coated thermoplastic part. While claim 7 does not positively recite the limitation that inspecting the coated thermoplastic part is performed "after said articles is removed form said mold" as cited in applicant's claim 1, it would have been obvious in the art to inspect the molded parts after removal from the mold since it would be more convenient to determine if the substrate exhibits voids after it is removed from the mold since the mold will not be obstructing the substrate. Claim 10 and step b) of 10/534264 is taken to be identical to steps (i) through (iii) in claim 1 as the maintenance of a constant volume throughout the process is merely an optional limitation for claim 1. While claim 1 does not teach step c) in 10/534264, claim 7 in the present application teaches that values for one or more of the process conditions for the substrate formation and coating steps are controlled and recorded by a control apparatus operatively associated with the mold", which is obvious over

"recording said optimal parameters for said particular mold and polymeric materials using a data collection means" as recited in step c) of 10/534264.

In regards to claim 2, the claim is identical to claim 8 of Application No. 10/534264 except the limitation "first composition" as required by applicant's claim 2 reads on "thermoplastic" in claim 8 of Application No. 10/534264.

In regards to claims 3 and 10, the claims are identical to claim 9 of Application No. 10/534264 except the limitation "first composition" as required by applicant's claim 3 reads on "thermoplastic" in claim 8 of Application No. 10/534264 and the limitation "coating composition" as required by applicant's claim 10 reads on "thermoset" recited in claim 9 of Application No. 10/534264.

Regarding claim 4, the claim is substantially identical to claim 11 of 10/534264.

Regarding claim 5, the claim is substantially identical to claims 12 and 13 of 10/534264.

Regarding claim 6, the claim is substantially identical to claims 15 and 16 of 10/534264.

Regarding claim 7, the claim is substantially identical to claim 17 of 10/534264.

Regarding claim 8, the claim is substantially identical to claim 14 of 10/534264.

Regarding claim 9, the claim is substantially identical to claim 18 of 10/534264.

Drawings

4. Objections to the drawings in the previous office action are withdrawn in view of amendment to the drawings.

Specification

5. Objections to the specification in the previous office action are withdrawn in view of amendments to the specification.

Claim Objections

6. Claim 1 is objected to because of the following informalities: in line 22 of the claim, a period is missing at the end of the sentence. Appropriate correction is required.

7. Claim 10 is objected to because of the following informalities: in line 3 of the claim, "coating compositions" should read "coating composition". Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. Rejection of claim 3 under 35 U.S.C. 112, second paragraph in the previous office action is withdrawn in view of amendment to the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-6, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by McBain et al. (2002/0039656).

Regarding claim 1, McBain et al. teach a method for assuring that coated molded articles meet predetermined quality standards, said articles being formed entirely in a mold by a process that includes forming a substrate from a first composition using a first set of process conditions and subsequently, using a second set of process conditions, coating said substrate by injection a coating composition into said mold and allowing said coating to cure on said substrate so as to provide a coated molded article, said method comprising: Inspecting a first coated molded article manufactured by the process after said article is removed from said mold, determining whether

said coated molded article meets quality standards for substrate formation and, if the article does not meet such standards, modifying the substrate formation step of the process by adjusting one of more of first composition injection volume (shot size), first composition injection temperature (temperature in the nozzle), and first composition injection pressure (injection high, injection pack, and injection hold), and determining whether said coated molded article meets quality standards for coating and, if the article does not meet such standards, modifying the coating step of the process by adjusting one or more of cure time and injection time (delays in seconds after mold is closed) at injection of said coating composition, and wherein the determination of whether said coated molded article meets quality standards for coating compares determining whether said coating is intermingled with said substrate, whether a surface appearance of said coating is acceptable, and whether said coating is sufficient adhered to said article (see abstract, paragraphs 2, 7, 13, 21, 53-55, 63-64, 66-71, 74-76, and tables II-III). While the claim recites that "said mold optionally having a constant volume maintained throughout the process", however, McBain is not required to teach this limitation since this limitation is not positively required in the present claim.

Regarding claim 2, McBain et al. teach that the determination of whether said coated molded article meets quality standard for substrate formation comprises evaluating whether said article exhibits inadequate filling of said mold by said first composition (paragraph 64).

Regarding claim 3, McBain et al. teach that the first set of process conditions includes one or more injection pressures for said first composition, one or more injection temperature for said first composition (temperature in the nozzle), one or more injection volumes for said first composition (shot size). See paragraphs 7, 66 and tables II and III.

Regarding claim 4, McBain et al. teach that the coating composition is injected into the mold after the substrate has cooled to a point where the first composition is below its melt temperature (see abstract, paragraphs 0007, 0054, 0071-0073 and 0077).

Regarding claim 5, McBain et al. teach that point where the first composition is below its melt temperature is determined by monitoring in the mold at least one of a temperature and an internal pressure (see paragraph 0072).

Regarding claim 6, McBain et al. teach that the modification of step (c) is performed by adjusting one of a time at which said coating composition is injected into said mold relative to a time at which the substrate formation step of the molding process is begun and a time at which said mold is opened and the coated article is removed from said mold relative to a time at which said coating composition is injected in said mold (see paragraphs 74-77 and the table below paragraph 76).

Regarding claim 8, McBain et al. teach that steps (a) through (c) are performed repeated until a coated article that meets said quality standards is produced (see paragraphs 66-67 and 74-76).

Regarding claim 10, McBain et al. teach that the second set of process conditions includes one or more injection times for said coating compositions (delay in seconds after mold is closed), and one or more cure times for said coating composition (see paragraphs 7, 66, 74, 76 and tables II & III). While McBain et al. do not positively teach that the second set of process conditions includes one or more injection pressures for said coating compositions and one or more injection volumes for said coating compositions, both injection pressures and injection volumes are inherent properties of any injection molding process.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McBain et al. as applied to claim 1 above, and further in view of Okamoto (English abstract and machine translation of JP11-147236).

Regarding claim 7, McBain et al. teach that processing variables for the substrate formation and coating steps are controlled by a control apparatus operatively associated with said mold (see paragraph 21). McBain et al. do not teach that values for one or more of said process conditions for the substrate formation and coating steps are recorded by the control apparatus operatively associated with said mold. However, Okamoto teaches that values for process conditions for the molding steps are controlled and recorded by a control apparatus 60 operatively associated with the mold 3, 4 (fig. 1, paragraphs 12-13, 23-24, 27 and 33 in machine

translation of specification). It would have been obvious to one of ordinary skill in the art to store process conditions using the control apparatus as taught by Okamoto in the method of McBain et al. since Okamoto et al. teach that optimized process conditions stored in the control apparatus may be use in future molding processes (see fig. 1, English abstract, paragraphs 1, 8, 13, 16 and 27 in machine translation of the specification). It would also have been obvious to one of ordinary skill in the art to use the control apparatus to control and record process conditions for the coating steps in addition to the conditions for the substrate formation so that the optimized process conditions for the coating steps may also be stored for use in future molding processes.

Regarding claim 9, McBain et al. do not teach that the process conditions used to create the coated article meeting said quality standards are stored in a control apparatus associated with said mold such that said process conditions can be recalled for use in future molding operations. However, Okamoto teaches that the optimized process conditions are stored in a control apparatus 64 associated with the mold 3, 4 and may be recalled for use in future molding processes (fig. 1, English abstract, and paragraphs 1, 8, 13, 16 and 27 in machine translation of the specification). It would have been obvious to one of ordinary skill in the art to provide the teaching of Okamoto in the method of McBain since this enables automation of the molding process, therefore increasing efficiency of the molding process.

Response to Arguments

14. Applicant's arguments filed 11/20/08 have been fully considered but they are not persuasive. Regarding claim 1, applicant states that McBain et al. do not teach a method for assuring that coated molded articles meet predetermined standards by determining whether the coated molded article meets quality standards for coating and modifying the coating step of the

process by adjusting one or more process conditions. Applicant points to paragraphs 66-70 of McBain et al. which describes variable that may be adjusted to optimize substrate formation and argues that these paragraphs do not refer to the coating composition. Applicant states that the only mention of adjusting the injection of the coating is found in paragraph 0071 of McBain et al. Applicant further points to tables II-III which describe the substrate materials and the machine settings found to yield optimum results, and argues that the tables indicate the optimal substrate material and variable, not the optimum coating variables as is recited in claim 1. Applicant further states that McBain et al. do not teach a method for assuring coated molded articles meet predetermined standards by determining whether the coated molded articles meet predetermined standards by determining whether the coating is intermingled with the substrate, whether a surface appearance of the coating is acceptable, and whether the coating is sufficiently bonded to the article. The Examiner disagrees with applicant's arguments. The Examiner agrees that paragraphs 66-70 and tables II-III of McBain et al. do not refer to the coating composition. However, paragraphs 74-76 were also cited in the previous office action in the rejection of claim 1 to show that the cure time and injection time are adjusted in the coating step of McBain et al. The claim limitation requires "one or more of cure time, injection time, injection pressure, injection volume, injection temperature, and mold temperature", therefore the prior art only needs to show that AT LEAST one process conditions is adjusted in the coating step. Furthermore, McBain et al. teaches a method for assuring coated molded articles meet predetermined standards by determining whether the coated molded articles meet predetermined standards by determining whether the coating is intermingled with the substrate, whether a surface appearance of the coating is acceptable, and whether the coating is sufficiently bonded to

the article in paragraphs 74-76 as cited in the previous office action. The Examiner wishes to point out that paragraph 76 in McBain et al. also includes the table which is between paragraphs 76 and 77. McBain et al. clearly teaches that the parts were determined to have good appearance and good adhesion in paragraph 75 and parts were determined to have coating intermingled with the substrate and coating not having good adhesion to the article in the table which is part of paragraph 76.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUE LIU whose telephone number is (571)270-5522. The examiner can normally be reached on Monday to Friday 9:30 - 6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Phillip Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/X. L./
Examiner, Art Unit 1791

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791